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## *Wetland Compensatory Mitigation Guidance Document*

### **Focus**

- Compensatory freshwater wetland mitigation;
- Primarily single project; and
- Audience: applicants, consultants, regulators (federal, state and local).

### **Goals and Objectives**

- Improve the quality / effectiveness of compensatory mitigation;
- Provide clear guidance on requirements and expectations for compensatory mitigation;
- Consistency in requirements between the Corps of Engineers (Corps), Environmental Protection Agency (EPA), WA State Department of Ecology (ECY) and local governments (by adoption of Best Available Science);
- Streamline permitting processes;
- Facilitate the process for the public by providing a user-friendly document that is easy to update and is web accessible; and
- Ensure that mitigation guidance is consistent with the Best Available Science (BAS).

### **Introduction**

- Goals and Objectives of the document;
- What this publication is (and is not) – mitigation sequencing and where this document fits in (it is focused on compensatory mitigation);
- How the document is organized;
- Description of the level of information provided; and
- A flow chart will be provided that directs interested persons to various sections of the document.

### **Section 1 General information on Compensatory Mitigation**

#### **A. Regulations**

- 1) CWA (404(b)1 guidelines), 90.48, 90.74, 90.84, GMA, SMA, SEPA, NEPA;
- 2) What is a jurisdictional wetland?– different for Corps, EPA (tribal and federal lands), ECY (Prior Converted Cropland & Isolated wetlands), and Local Govts;

- 3) When there are different requirements for compensation, applicants should base their design on the most stringent ones. Different agencies have different requirements because their authorities, laws and rules are different; and
- 4) Emphasize that requirements change: contact the agencies for the most current conditions.

#### **B. Formal Policies and Guidance**

- 1) List of policy references with brief description of each (note to always contact the agencies for the most current policies and guidance); and
- 2) Appendix B will have hard copies of policies (also will be web accessible).

#### **C. Permit programs/processes**

- 1) Who's on first? This section will include a brief overview of how the process works (e.g. for Individual 404s the Corps is generally the lead, for NWP you should refer to the 401 conditions, etc.); and
- 2) Advise applicants to contact agencies (also Office of Permit Assistance -OPA) directly and early on in the process to set-up pre-application meetings, etc.

#### **D. How wetland mitigation integrates with ESA**

- 1) Include reference to Conservation Banking Guidance

#### **E. Mitigation Sequencing**

- 1) Discussion of avoidance; and
- 2) Discussion of the "least environmentally damaging and practicable alternatives" (e.g. avoiding high quality upland vs. low quality wetland and impacts to mitigation site vs. high quality wetland).

#### **F. No net loss (goal of) and the role of compensation**

#### **G. Landscape-based approach to mitigation**

#### **H. Type of compensation**

- 1) In kind vs. Out of kind; and
- 2) Mitigation actions (definitions and policy preferences).
  - a) Restoration (Reestablishment, Rehabilitation);
  - b) Creation (Establishment);

- c) Preservation; and
- d) Enhancement.

**I. Location for compensation**

- 1) On site vs. off site;
- 2) Discussion of which functions are tied to (dependent upon) position in the landscape; and
- 3) Location is most likely driven by local government requirements.

**J. Options for compensating for wetland losses (need to define all of these)**

- 1) Project-specific mitigation
  - a) Individual project mitigation
  - b) Advance mitigation
  - c) Consolidated mitigation
- 2) Programmatic mitigation approaches
  - a) Wetland banking
  - b) In lieu fee programs
  - c) Programmatic mitigation areas (at the local level)

**K. Timing of mitigation and site development activities**

- 1) Concurrent vs. Advance, etc; and
- 2) Include discussion of phased construction/planting.

**L. Compensation Requirements**

- 1) Ratios
  - a) Factors affecting (risk of failure, temporal losses, area replacement)
- 2) Functions
- 3) Area
- 4) Monitoring
- 5) Permanent protection
- 6) Buffers
  - a) Requirements for mitigation sites
  - b) When buffers can generate mitigation credit
- 7) Scaling of Mitigation Requirements (based on size and degree of impact )

- 8) Also note that requirements are based on most stringent regulations (Corps vs. ECY vs. Local govt.)
- 9) Discussion of reasonable assurance

#### **M. Resource trade-offs**

- 1) Compensating for wetland impacts with non-wetland mitigation (riparian, buffers, upland forest habitat etc.)

#### **N. Stormwater and wetland mitigation**

- 1) Include discussion of Low Impact Development (LID)
- 2) Guidance on how stormwater management can be an asset
- 3) Clarify when credit is or is not given for stormwater management

#### **O. Mitigation for other aquatic resources**

- 1) Direct interested persons to resources (e.g. Integrated Streambank Protection Guidelines)
- 2) Ties to resource tradeoffs

### **Section 2 - Technical Guidance - Compensatory Mitigation**

**We will have a general discussion on the various subjects first, and then discuss information needs and requirements for each subject in the annotated outline for the mitigation plans.**

E.g. The “General Subject Discussion” on *Site Selection* would provide technical guidance on how to select a site, whereas the “Mitigation Plan Outline” would indicate that the *Rationale* for selecting the mitigation site should be included in the report.

#### **A. Introduction**

- 1) What does this section cover?
- 2) Overall plan development process (iterative),
- 3) Report expectations (scale the effort based on impact size, degree of loss, applicant size/resources → examples will be provided)

#### **B. General subject discussions**

- 1) Level of expertise needed (at a minimum)

- a) Need to have the ability to delineate wetland, determine level of function, soils, etc.
  - b) Reference to Appendix F (minimum requirements for mitigation package)
- 2) Hiring a wetland consultant
  - a) You may need a range of expertise for your project (wetlands, wildlife, hydrology, etc)
  - b) Recommend same consultant from beginning to end of the project
- 3) Site selection (discussion of landscape context)
- 4) Hydrology
  - a) Appropriate hydrology is one of the most critical factors for wetland success
  - b) Include clarification of hydrologic criteria (e.g. soils need to be saturated to the surface)
  - c) Site should not be designed to meet the minimum hydrologic criteria (risk)
  - d) Hydrology for site should be designed based on goals and objectives (e.g. amphibian habitat)
- 5) Invasive species
- 6) Function assessment
  - a) Mitigation plan should include discussion of how they designed the mitigation to provide the proposed functions (rationale and structural design features)
- 7) Site design (make tie to goals, objectives, and p.s.)
- 8) Goals, Objectives, and Performance Standards
  - a) Reference Mary Ossinger Report
  - b) Use of tables in report to clearly organize information
  - c) Examples on how to develop (include good and bad examples)
- 9) Maintenance
  - a) Short term maintenance and the link to adaptive management
  - b) Long term maintenance considerations
- 10) Monitoring
  - a) What? Why? When?
- 11) Contingency plans / Adaptive Management
- 12) Site protection
  - a) Requirements
  - b) What happens when a mitigation site is impacted?
- 13) Reference Sites
  - a) When does it make sense (what are they, why use them, how are they used)

- b) Use of successful mitigation sites

**C. Mitigation Plan Contents –NEEDS WORK. A conceptual mitigation plan outline will be included as well.**

Annotated Outline (This outline would be fleshed out with the specific elements that need to be included in each section and the level of detail required). Needs to also include a discussion of scale – what info is minimum necessary for small projects versus larger more complex projects.

- 1) Executive Summary
- 2) Mitigation Project Description
  - a) Project Location
  - b) Responsible Parties
  - c) Description of Overall Project
  - d) Wetland Delineation of Impact Area
- 3) Ecological Assessment of Impact Site
  - a) Existing Vegetation
  - b) Existing Water Regime
  - c) Existing Soils
  - d) Existing Fauna
  - e) Functions and Values
  - f) Water Quality
  - g) Buffers
  - h) Wetland Rating
  - i) Position and Function of the Wetland in the Landscape
- 4) Mitigation Approach
  - a) Mitigation Sequencing
  - b) Previous experience of designer and with proposed mitigation design and level of success (discussion of where and how this has been done before→ addresses level of risk)
  - c) Goals and Objectives for mitigation project
  - d) Performance standards
- 5) Proposed Wetland Mitigation Site
  - a) Site description
  - b) Ownership
  - c) Site Selection Rationale

- d) Ecological Assessment of Mitigation Site (include baseline information and historical land uses)
- e) Constraints of site which could affect design and site development  
Constraints include items outside of the control of applicant
- 6) Site Plan (include information from lessons learned, practical tips)
  - a) Site surveys/topography (by registered surveyor?)
  - b) Water Regime
  - c) Planting plan (include plan view and cross-section of communities that will be planted)
  - d) Soils (Grading plan view and cross section)
  - e) Fauna
  - f) Development of Habitat Structure
  - g) Water Quality
  - h) Buffers
  - i) Landscape Plans
  - j) Construction specifications
- 7) Site Protection (discuss preferred options → conservation easements vs. deed restrictions)
- 8) Maintenance, Monitoring and Contingency Plans
- 9) Implementation Schedule (When? What? Where?)
  - a) Construction Schedule
  - b) Maintenance Schedule
  - c) Monitoring Schedule
  - d) Reporting Schedule
- 10) Performance Bond
- 11) Additional Information for Preparation of Final Plans
- 12) "As-Built" Report (what are they, who it goes to, why are they required, when are they required)

## **Appendix A - Definitions**

## **Appendix B – Policies and Guidance** (Hard copies and/or electronic references provided)

### **A. Corps EPA Mitigation MOA (1990?)**

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- B. Alternative Mitigation Policy
- C. RGL 02-02
- D. Wetland banking federal guidance
- E. State banking guidance (draft rule)
- F. ILF federal guidance
- G. Floodplain Executive Order 11988
- H. Invasive Species Executive Order 13112
- I. No Net Loss Executive Order
- J. Conservation Banking Guidance
- K. Corps Guidance on Cranberries

### **Appendix C - Templates and Checklists**

- A. Annotated outlines for mitigation plan and conceptual mitigation plan
- B. Monitoring report template
- C. Mitigation plan checklist (identify minimum required info)
- D. Site selection checklist
- E. Monitoring report checklist
- F. Checklist of minimum requirements for mitigation package (all should have delineation, wetland rating...in addition you may need –function assessment, groundwater study/hydrologic analysis, stormwater plan, etc.—depending on your project).

### **Appendix D – Agency Contacts**

- A. Corps contacts
- B. EPA contacts
- C. Ecology contacts (including OPA)
- D. Local govt. contacts

\*Need to talk about compliance, enforcement and success somewhere.